

A Primer on the Prototype

*Developed by Staff Working Group
Presented by TACIR Staff*

Basic Education Program Review
Committee

21 November 2006

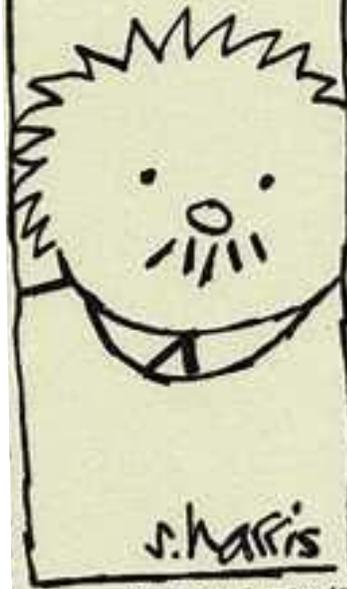


What past explanations of our models may have looked like to you.

EINSTEIN SIMPLIFIED

But if it were that simple, it wouldn't work!

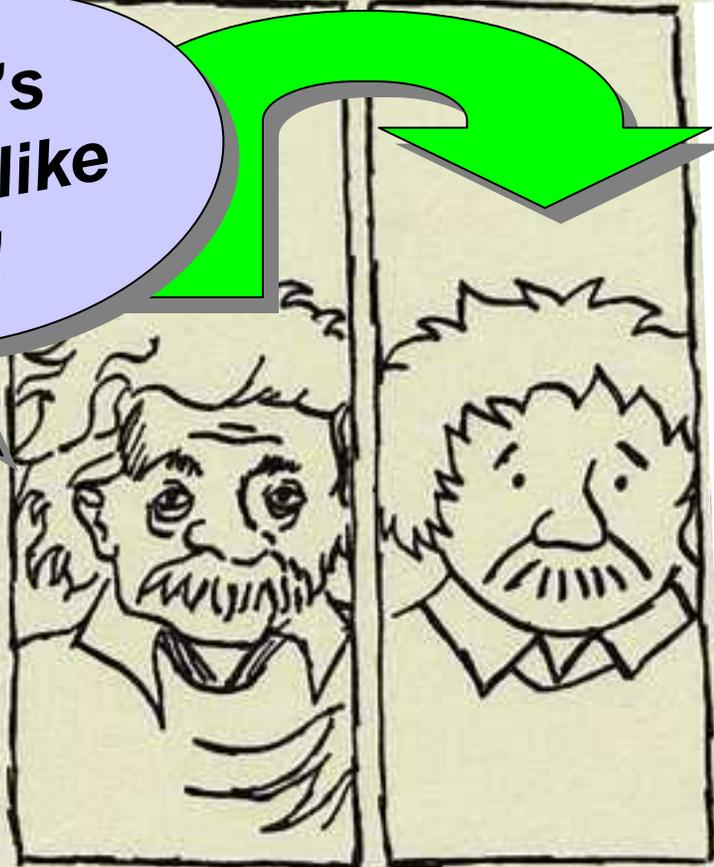
What we wish we could make them look like.



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EINSTEIN SIMPLIFIED

That's
more like
it!

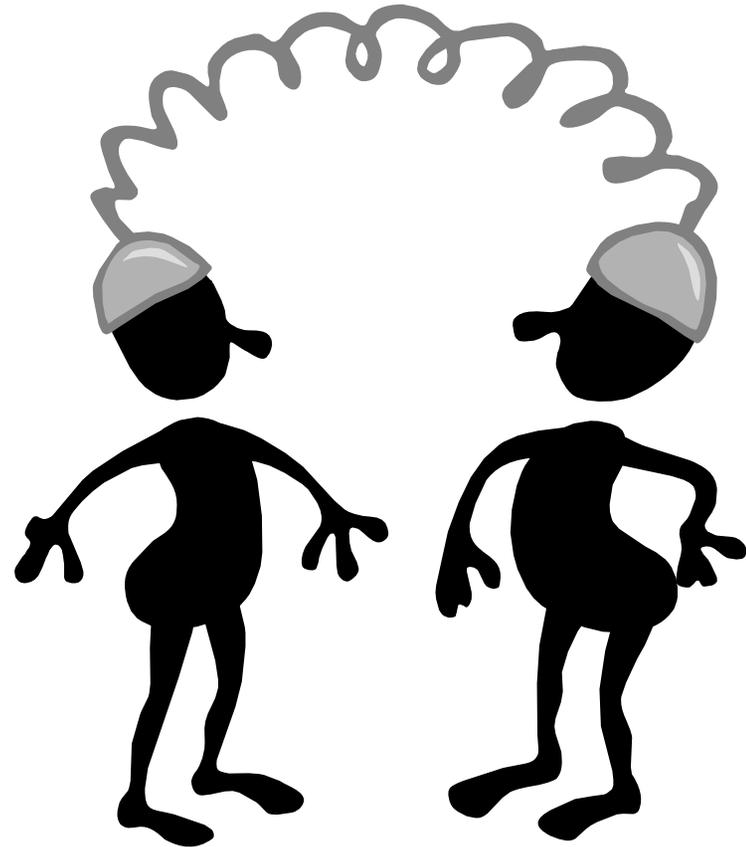


***What we
hope to
do for
you
today.***

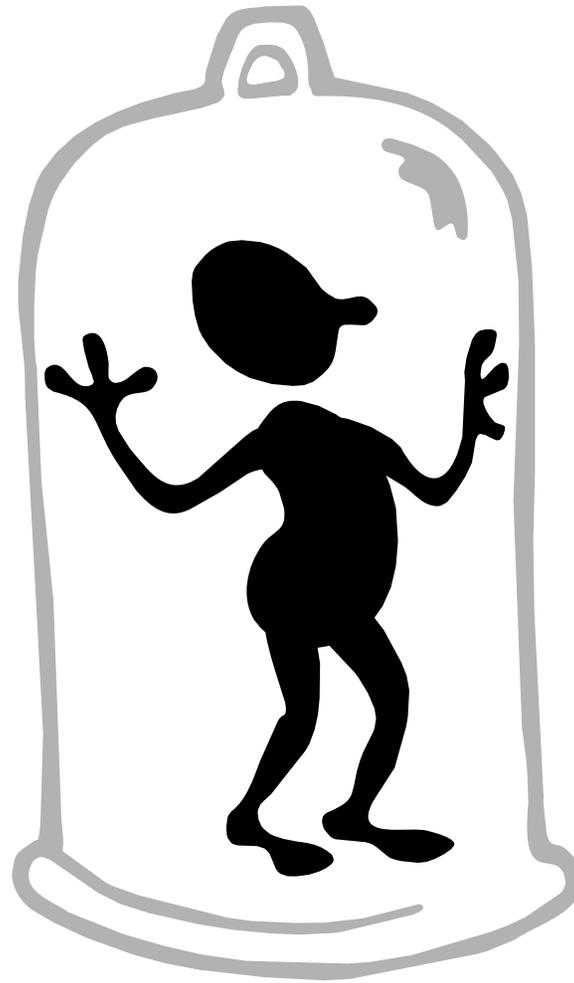
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2003 Staff Working Group

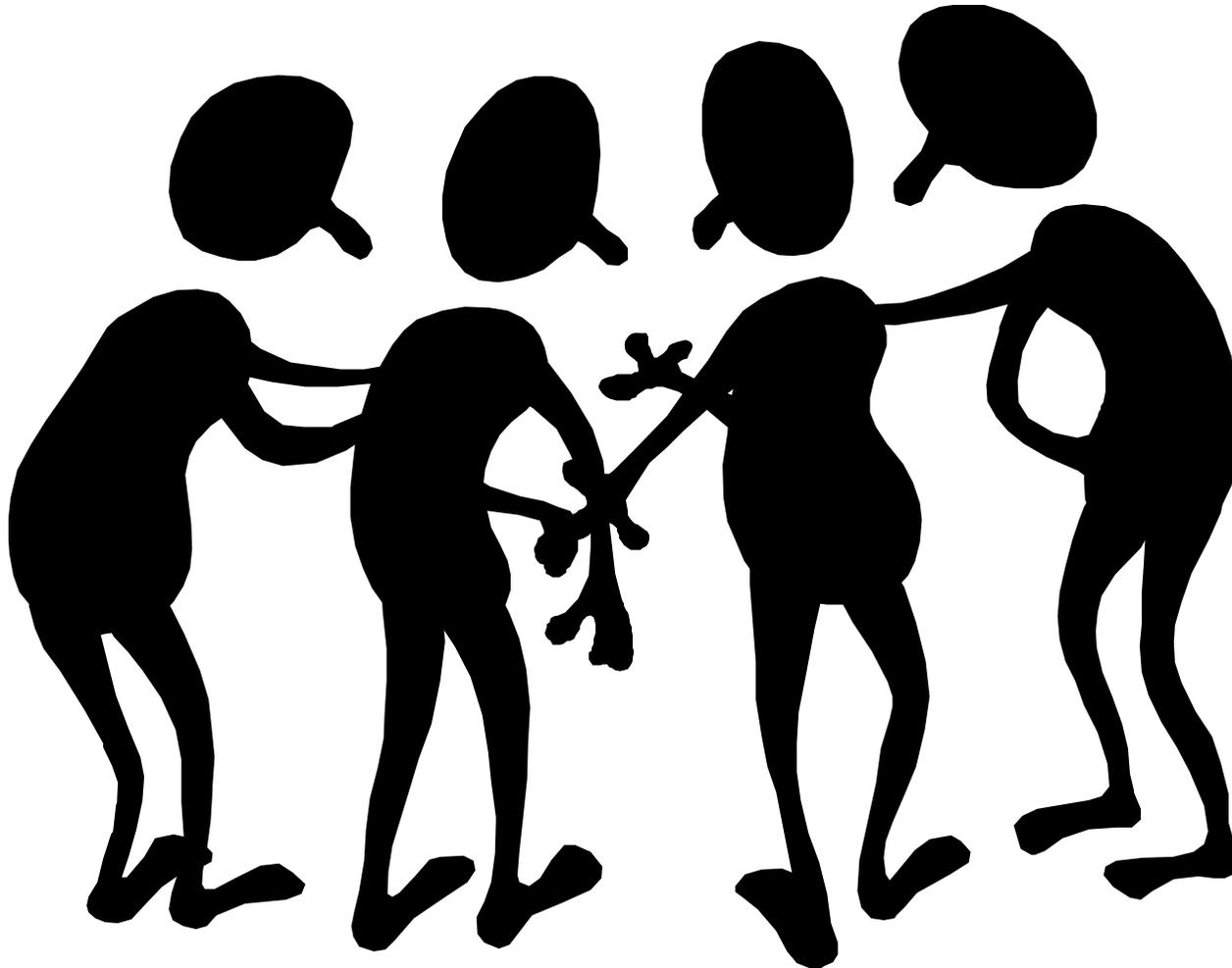
- ▶ *TACIR staff*
- ▶ *Comptroller's staff*
- ▶ *With review by outside experts from **MTSU, TSU, VU***
- ▶ *Reporting to **Governor Bredesen's Task Force on Teacher Pay***



We did not do this in a vacuum!



It was a collaborative process.



The Starting Point

Fundamental Principles of Equalization

- #1 Substantially Equal Educational Opportunity for All Students*
- #2 Comprehensive Measure of Actual Fiscal Structure*
- #3 Taxpayer Equity*

#1 Substantially Equal Educational Opportunity, Round I

The constitution contemplates that the power granted to the General Assembly will be exercised to accomplish the mandated result, a public school system that provides *substantially equal educational opportunities to the school children of Tennessee.*

Tennessee Supreme Court
1993

#1 Substantially Equal Educational Opportunity, Round II (1995)

It appears that the BEP addresses both constitutional mandates imposed upon the State—the obligation to maintain and support a system of free public schools and the obligation that that system afford substantially equal educational opportunities.

The BEP is designed to accomplish two significant objectives—provide an excellent education program for all K thru 12 students throughout the State and provide substantially equal educational opportunities for those students. ... Adequate funding is essential to the development of an excellent education program, and immediate equalization of funding would not necessarily insure immediate equalization of educational opportunities or a more excellent program.

#1 Substantially Equal Educational Opportunity, Round III (2002)

In short, determining how to fund teachers' salaries and the appropriate level of those salaries are choices for the legislature to make, assuming of course that the legislature discharges its powers in a manner that comports with the Constitution.

... The critical point, however, is that the educational funding structure be geared toward achieving equality in educational opportunity for students, not necessarily "sameness" in teacher compensation.... The objective of teacher salary equalization is to provide substantially equal opportunities for students, not teachers.

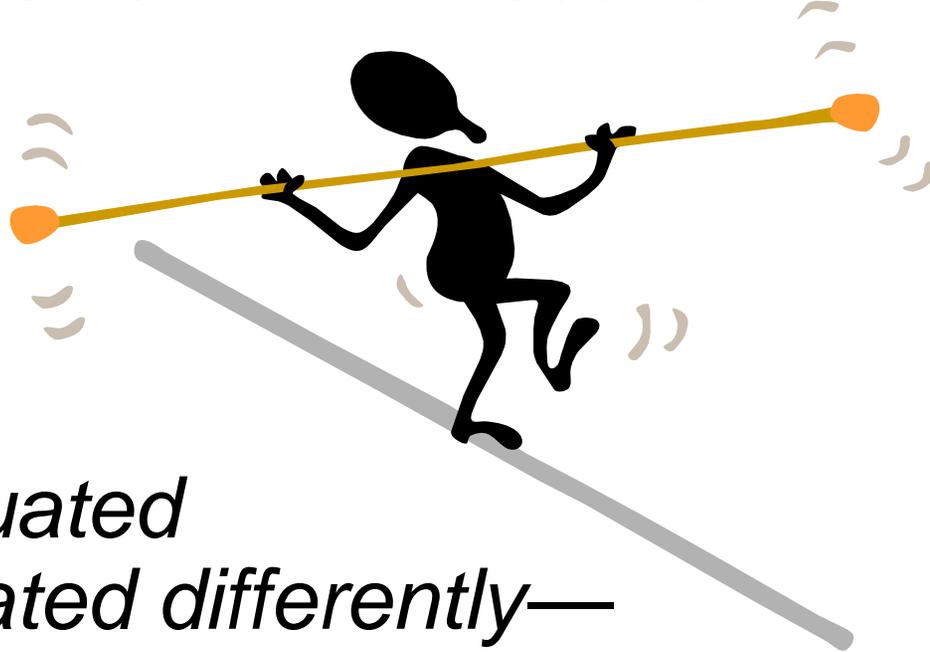
#2 Comprehensive Measure of Actual Fiscal Structure

- ▶ *Statutory authority of counties to tax*
- ▶ *Statutory authority of cities to tax*
- ▶ *Statutory authority of special school districts to tax*
- ▶ *Statutory requirement of sharing by counties with cities & SSDs*



#3 Taxpayer Equity

- ▶ *Similarly situated taxpayers treated similarly—consideration of economic well-being*



- ▶ *Differently situated taxpayers treated differently—consideration of tax exportability*

First Things First



- ▶ *Critical look at county model*
- ▶ *Close inspection of existing laws*
- ▶ *Closer look at how other states do it*
- ▶ *Critical look at all potential sources of data*

Critical Look at County Model

- ▶ *County model used in system-level formula*
- ▶ *Out-of-date tax equivalent payments*
- ▶ *State-shared taxes, which are embedded in city appropriations,*
 - ✘ *excluded from county revenue used for schools;*
 - ✘ *excluded from tax base measures for both cities and counties*
- ▶ *Poor measure of taxpayer well-being*
- ▶ *Service burden overlaps BEP components*

Close Inspection of Existing Laws

Structure created by Tennessee General Assembly:

- ◆ *differing authority of counties, cities and special school districts to raise funds for schools*
- ◆ *requirement that counties share their school revenue with cities & SSDs*
- ◆ *state tax revenue given to local governments and available or earmarked for schools*





Closer Look at How Other States Do It

- ◆ *Most of the 50 states have only one type of local jurisdiction operating school systems, typically independent school districts that all have the same taxing authority.*
- ◆ *In most of the remaining states, schools rely solely on property taxes for local revenue.*
- ◆ *All of the local jurisdictions in states that rely on more than one source of local revenue have the same taxing authority.*
- ◆ *No state has jurisdictions that operate schools and share revenue with other school systems.*
- ◆ ***Tennessee is unique in this respect.***

Critical Look at All Potential Sources of Data

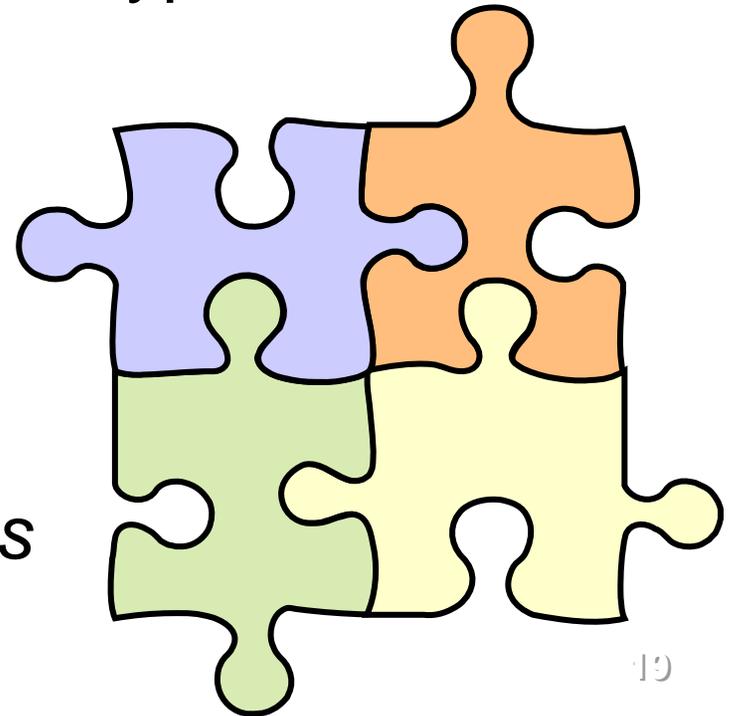
- ▶ *Out-of-date tax equivalent payments—EXCLUDED*
- ▶ *State-shared tax revenue, which is embedded in or supports city appropriations,*
 - ✘ *excluded from county revenue used for schools;*
 - ✘ *excluded from tax base measures for both cities and counties*

ALL AVAILABLE OR EARMARKED FOR SCHOOLS INCLUDED

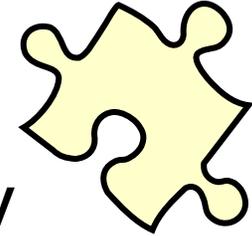
- ▶ *Poor measure of taxpayer well-being—PCI REPLACED WITH COUNTY MHI & SYSTEM POVERTY*

Putting the Pieces Together

- Limit scope to what is actually being done now
 - ✘ no tax rates recommended or imposed
 - ✓ actual average equals average of estimates
- Include factors for all three basic types of school systems
- Include all major sources of revenue
- Use regression to objectively estimate effect of factors on actual revenue—
an entirely data-driven process



Limit scope to what is actually being done now

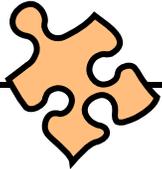


Average of estimates produced by regression model **exactly** equals average of **actual revenue** for schools

- ▶ Automatically limited to amount of revenue 'fed into' the model
- ▶ Simple average of first column of numbers = simple average of last column of numbers

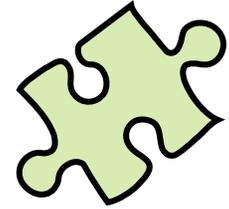
No changes in state or local fiscal structures

Include factors for all three basic types of school systems

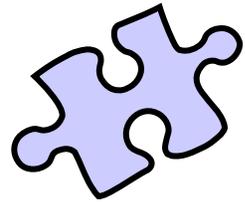


	County School Systems	City School Systems	Special School Districts
Shared Property Tax Base	✓	✓	✓
Unshared Property Tax Base		✓	✓
Shared Sales Tax Base	✓	✓	✓
Unshared Sales Tax Base		✓	
State-shared Tax Revenues	✓	✓	
County Median Household Income	✓	✓	✓
School-age Population Poverty	✓	✓	✓

Include All Major Sources of Revenue



- ▶ Actual revenue per pupil
 - ✓ *All property tax revenue, including PILOTS*
 - ✓ *All sales tax revenue*
 - ✓ *All statutory local taxes*
 - ✓ *All general fund transfers by cities for schools*
- ▶ Property tax base per student
- ▶ Local sales tax base per student
- ▶ Available and earmarked state-shared tax revenue per student



Use Regression to Objectively Estimate Effect of Factors on Actual Revenue

—an entirely data-driven process—

1. *Actual revenue fed into formula*
2. *Compared to actual tax base and estimated wealth factors for each system*
3. *Base amount for all systems and one weight for each factor determined by formula*

. . . and it all goes round and round

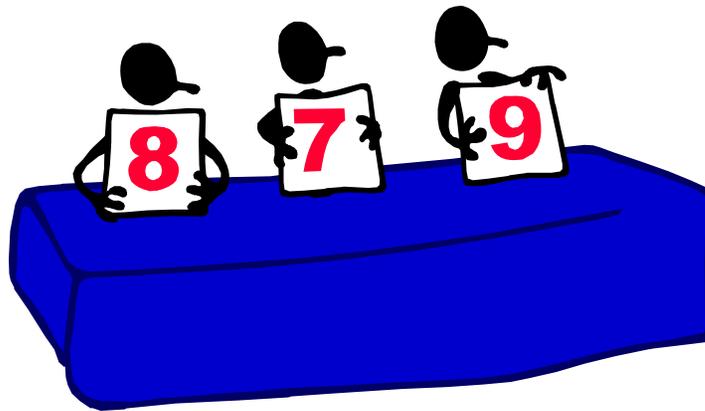


And It Comes Out Here

Values x Weights = Estimated Capacity

Average Actual Revenue per Pupil: \$1,932			
<i>Factors</i>	<i>Values</i>	<i>Weights</i>	<i>Results</i>
Base Value Included for Each System	n/a	-\$46	-\$ 46
Shared Property Tax Base	\$89,244	+0.0046	410
Unshared Property Tax Base	\$36,277	+0.0050	182
Shared Sales Tax Base	\$41,883	+0.0213	891
Unshared Sales Tax Base	\$27,319	+0.0010	27
State-shared Tax Revenue	\$235	+0.1248	29
Shared Tax Exportability Ratio	34.67%	+\$537	186
Unshared Tax Exportability Ratio	16.69%	+\$126	21
County Median Household Income	\$33,732	+0.0148	500
System Child Poverty Rate	18.70%	-\$1,438	-269
Fiscal Capacity (Estimated Revenue) per Pupil:			\$1,932

BUT Is This An Improvement?



What Is the Standard?

What Is the Standard?

**“substantially equal
educational opportunities
for students”**

Tennessee Supreme Court

1993

1995

and

2002

“Substantially Equal Educational Opportunities for Students”



More Disparity



Less Disparity

Disparity

Based on total—*state and local combined*—
revenue per student

(estimated based on FY05 local revenue and FY07 state funding)

▶ Actual disparity now

Coefficient of Variation = 0.122

▶ Estimated disparity with this method of
equalization

- *and no other changes*

Coefficient of Variation = 0.101

- *and other proposed changes*

Coefficient of Variation = 0.xxx

- Actual disparity before Small Schools III
(FY02)

Coefficient of Variation = 0.120

The Ending Point

Significant Progress Toward . . .

- #1 Substantially Equal Educational Opportunity for All Students*
- #2 Comprehensive Measure of Actual Fiscal Structure*
- #3 Taxpayer Equity*



Can we bridge the divide?

***Systems
that benefit
from a
change***

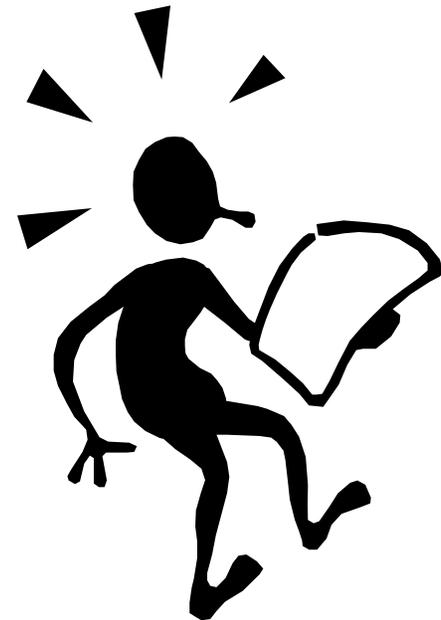


***Systems
that benefit
from the
status quo***



It's a BIG Change!

*How do we
make such a
difficult
transition?*



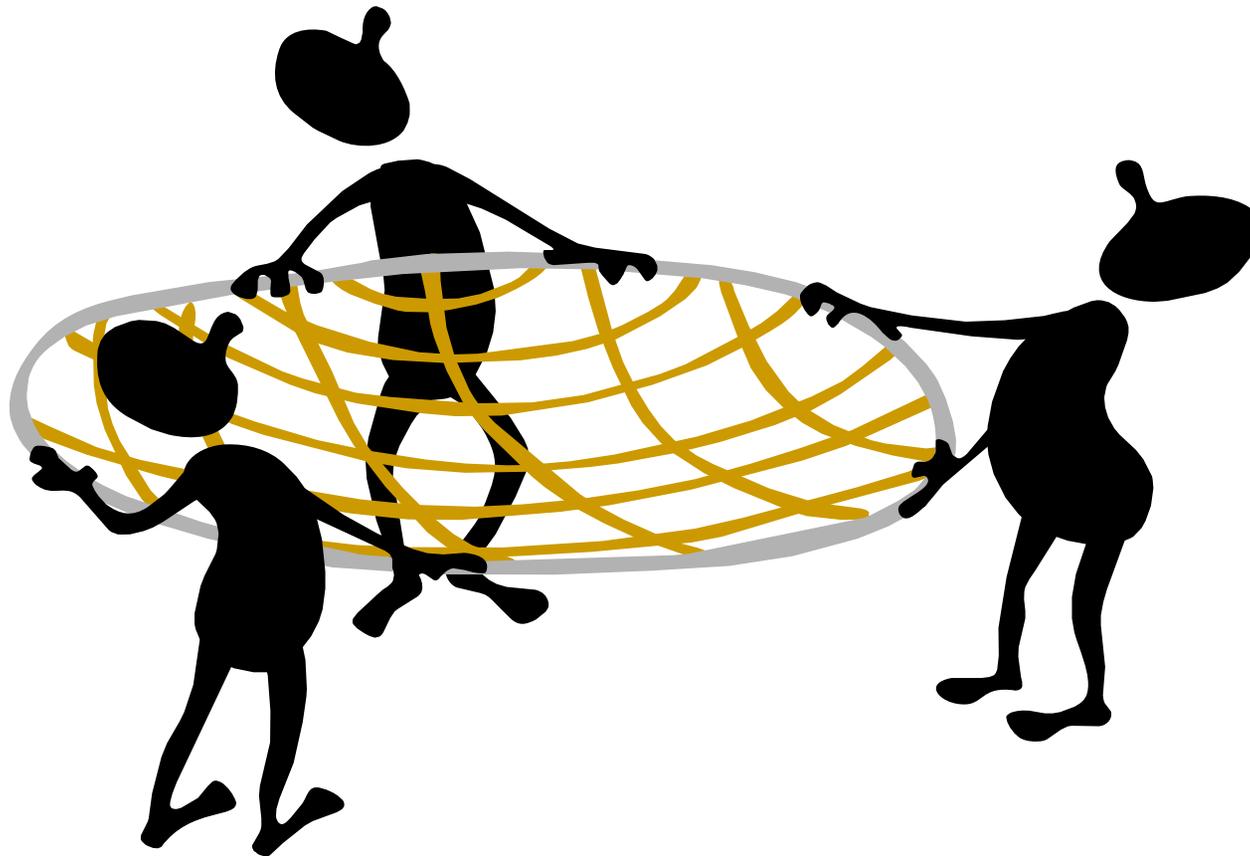
Phase it in over time

along with
significant adequacy improvements

- Full funding for students at risk
- Increased funding for services to English language learners
- Increased funding for teaching resources—*ask teachers what they need*
- Class-size ratios that better match those in the highest performing schools
- Transition toward 100% state funding (?)

Hold Systems Harmless

No system can be allowed to fall behind



All Systems Should Advance!



Questions?

